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ABSTRACT

There have been questions regarding the effectiveness of Federally funded programs. In this paper the possibility that programs might be effective but that their effectiveness is not being reported is investigated. Seven of the twelve Title VII bilingual programs in the New York City high schools were evaluated, using their funding proposals and Board of Education Evaluation Reports, to discover the relationship between input, process and product variables. It was determined that the reporting format made comparisons among programs or between programs and parent schools very difficult. Report forms are discussed. Selected input (personnel cost, staff mix and staff qualifications), process, and product (student attendance, examination scores, and language and achievement test results) variables are analyzed and the findings are described. Specific recommendations for improving reporting procedures are offered. Appended to the work are copies and analyses of individual school program budgets. (Author/GC)

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EVALUATING PROGRAM EFFECTIVENESS

Measuring Input, Process, and Product Variables in NYC Federally Funded High School Bilingual Programs

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ABSTRACT

Recently questions have arisen regarding the effectiveness of Federally Funded Programs. This paper investigates the possibility that programs might be effective but that the effectiveness is not being reported.

Seven of the twelve Title VII bilingual programs in the New York City high schools were evaluated using their funding proposals and B/E Evaluation Reports to discover what relations between input, process, and product variables might be found. It was determined that the reporting format made comparisons among programs or between programs and parent schools extremely difficult.

The report forms were discussed; selected input, process, and product variables were analysed; and over thirty findings of fact made.

In a final section, five specific recommendations for improving reporting procedures were made.

Complete program budgets were reviewed and analysed.

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I. INTRODUCTION

The original purposes of this paper were to first, determine if it were possible to analyse federally funded programs using Dunkin and Biddles' model of the teaching process and data on file at the Board of Education library at 110 Livingston Street, and second, if it were possible to attempt to draw a picture of the relationships found using a systems analysis model developed in a class for Professor Arno Bellack.

In their book, The Study of Teaching[1], Duncan and Biddle list four types of variables which affect the teaching process. These are; Presage Variables which concern the characteristics of teachers, Context Variables which concern the conditions to which the teacher must adjust - pupil characteristics, school environment, community, budgets etc., Process Variables which concern what teachers and students actually do in the classroom, and Product Variables which concern the outcome of teaching. These variables can easily be extended to a program instead of a classroom by expanding the process variables to include the program activities.

The systems analysis approach attempts to describe logical and statistical relationships among a universe of classes and sets, and to develop derived categories. Definitions and a model of the decision process are included in Appendix A. In practice, the data available was insufficient to support this approach.

1. Michael J. Dunkin and Bruce J. Biddle, The Study of Teaching (New York: Holt, Rinehart, Winston, 1974)

II. METHOD

During the 1975-76 school year there were twelve Title VII Bilingual programs in the New York City public high schools. A funding proposal describing each proposed program together with an Office of Educational Evaluation (New York City Board of Education) evaluation report on the implemented program were available for each of the programs at the Board of Education library. Seven of these programs were selected at random and these documents were examined to determine: first, the extent to which the required reporting system facilitated productivity measurement using the model above, and second, whether significant differences between similiar programs at different schools existed.

The seven randomly selected programs were selected from the universe of bilingual programs because of my personal interest and experience with bilingual programs in general and my belief that the bilingual programs of the City of New York were efficient, productive, popular, and successful. I was especially interested in reviewing programs that I felt were making a difference in order to investigate the ability of the reporting system to give evidence of the programs success and aid in determining the reasons for it.

III. DOCUMENTS REVIEWED

A. FUNDING PROPOSALS (BUDGETS)

A sample table of contents for a budget proposal taken from the program at school F is shown in Appendix B. The proposals for all seven programs followed the same format.

The actual budgets shown in Appendices C1-C7 were taken from

Section I. Appendix D gives a general budget summary for all programs while Appendixes E1-E8 develop various key ratios.

Sections II and III were legal boiler plate and showed little difference in wording from school to school.

Section IV (Program Narrative) was less helpful than expected as a source of context variables. Subsection 1 (Relative Need) varied little from school to school. In many cases large parts of these sections were identical word for word in each of the different applications.

Subsections 2 (Target Population) also lacked comparable data. At the time the proposal is written the actual identities of the students who will be served by the program are not known. Those writing the proposals are forced to speak in general terms of the population they wish to serve, not the students who will actually be in the program. In many cases these descriptions apply to the city as a whole. Thus, this section cannot provide detailed information that will allow the specific populations served by different programs to be compared.

Subsection 3 (Results or Benefits Expected) is also general in nature. The specific objectives ans the instruments by which they will be measured are not decided upon until after the project is funded and money is available to obtain the services of an evaluator. Specific information regarding goal selection and achievement for each program is found in the evaluation report.

Subsection 4 (Approach) describes both input and process variables. These are given as justifications of budget allocations rather than

descriptors of teaching methods and are detailed in appendixes E1-E7.

Subsection 5 (Staffing) gives a brief resume of selected key personnel in the program. It was not summarized for the following reasons:

1. The data was not readily quantifiable.

2. The number and type of personnel covered varied from school to school and the data was not always comparable.

3. The major intent seemed to be to show that personnel were qualified and licensed rather than to provide information as to differential staffing strategies .

4. Information as to types of personnel in program was already provided in the budget.

B. EVALUATION REPORT

Each program was evaluated by a different evaluator who reached an individual agreement with each project coordinator as to the objectives of the program and the methods to be used in ascertaining the degree to which the objectives had been met. This provided great scope for initiative but made comparisons difficult.

The format of each report consisted of a program description, an account of the evaluation agreement, a chapter on findings, a summary, and various technical appendices. The objectives chosen differed from program to program as did the methods used to determine degree of attainment.

It does not appear that either the Board or the Federal Government used the evaluation reports to compare programs or as a source of data

to be used in setting policy. A separate Federal evaluation was made for the Fiscal Year 1976-77 but it was not available for the year in question.

The budget proposals are filed in alphabetical order by year in one section of the library while the NYC evaluation reports are filed in the inner librarians office by B/E Function number. Neither report mentions the other with the exception that the proposal requires that an evaluation take place.

In my own program I was required to furnish data on an individual student basis for each student in the program but I was not able to get this information from the library or even verify its existence.

It was decided that it would be most profitable in a first approximation to concentrate on the budget section of the proposals, the approach as defined in both the proposal and evaluation and the findings section of the evaluation report.

IV. FINDINGS

A. VARIABLES USED IN STUDY

It proved unexpectedly difficult to separate the various classes of variables. In some cases a variable would be used in two different ways. Student ADA (Average Daily Attendence), for example, is technically a context variable since it is a characteristic of the school environment, yet it can also be viewed as process variable since it determines the amount of classroom instruction the average student received. Finally, in all of the evaluation reports, it was used as a product variable when each program compared its own attendence with that of the parent school and used the difference to measure the program's effectiveness in maintaining student interest and morale. Indeed, student ADA was the most widely used measure of the achievement of effective goals.

A second difficulty involved the absence of needed information. There was no simple method of determining teacher experience or qualifications. With the exception of pretest scores there was no method of determining a students previous school progress, SES, motivation, or even time in program. The last is important in view of a wide-spread belief that students show much more achievement their second year in the program than they do in their first. If this belief could be substantiated it would have important implications for funding and program structure. Also, unless such information could be factored out programs with large numbers of second year students might show a fallacious superiority over programs with only first year students.

There was almost no information on classroom processes and teaching

methods. Data reported referred almost exclusively to curriculum offered; summer, afternoon, and evening programs; family work, etc. Unless we have information as to how these programs were actually implemented within the classroom itself we have no way of comparing program efficiency.

In determining product variables there was no single measure used by all seven schools. This made comparative evaluation of product difficult to say the least.

A third difficulty concerned the interaction of variables. Variables by themselves are of little interest. It is only when they can be compared with other variables that the results can be useful. However, the more relations cross class boundaries the more difficult interpretations become. The lack of information concerning presage variables combined with a desire to isolate those variables which had the greatest affect upon outcomes resulted in joining presage and content variables into a single class, input variables. A table of those variables selected for analysis after a review of the funding proposals and evaluation reports is given on the following page. Please note that student ADA is listed as both a context and a product variable.

SELECTED KEY VARIABLES

1. INPUT

   A. Presage

      1. Personnel Cost (Source: Budget)
      2. Personnel Number (Source: Budget)
      3. Staff Development (Source: Budget)
      4. Staff Mix (Source: Budget)
         a. Teachers
         b. Classroom Paras
         c. Guidance
         d. Administration
         e. Other
      5. Staff Qualification (Source: Budget)

   B. Context

      1. ADA students (Source: Evaluation)
      2. Enrolled Students (Budget)
      3. Pre-test results (Evaluation)
      4. SES (Budget)
      5. Students previous School Progress (Not Available)

2. PROCESS

   A. Curriculum (Source: Budget & Evaluation)

      1. Core
      2. Elective
      3. Special Features

   B. Teaching Methods (Source: Evaluation)

   C. Class size and Organization (Source: Budget & Evaluation)

   D. Family and Community Work (Source: Budget)

   E. Tutoring (Source: Budget)

   F. Summer Program (Source: Budget)

3. PRODUCT-EVALUATION

   a) Attendence (Source : Evaluation)

   b) Inter-American Series (Source: Evaluation)

   c) Examination Grades (Source: Evaluation)

d) NYC Language Fluency Test (Source: Evaluation)

e) Stanford Achievement Test (Source: Evaluation)

f) Test of Proficiency in the English Language (Source: Evaluation)

g) Miscellaneous Tests (Source: Evaluation)

1. INPUT VARIABLES

a. Direct Personnel Cost (salary) as a percent of total budget was remarkably similar for all programs ranging from 61.55% to 67.42% with a mean of 64.46%. When average daily attendence perfnumber of personnel and personnel cost per average daily attendence were compared however, there were large differences between programs. Personnel cost per student ADA was triple at B ($968.74) what it was at A ($316.38). This was largely a function of student ADA.

Staff Development, Training and Travel all showed differences when measured against student ADA. Comparisons are difficult because the schools were not always clear as to which activity would be included under which heading. As a rule staff development seems to refer to paid tuition at local colleges while Training is In-Service. The two are not always differentiated. Also, travel may refer to staff attendence at conferences or student field trips or both.

Equipment and supplies also showed large differences between schools but they together never came to more than 5% of the budget. It is interesting to note that when fringe benefits and staff development are added to salary,Personnel Cost rise to 86.75% of total program cost. When other indirect personnel costs are added the percentage is 92.84%. These programs were based on staff and not technology.

b. While total personnel cost was stable from school to school, the staff mix was not. Actual teaching staff salaries averaged about 27% of the budget while administration and resource personnel accounted for 36.63% of the budget (the numbers do not add up to the 64.46% representing salary cost), In short, less than half the budgeted personnel cost went

to hire classroom teachers. In the budget proposals, classroom teachers are listed as "resource" teachers, implying that they are an appendage and not the base of the programs.

It was decided to select Number of Students Per Teacher, Number of Student ADA Per Teacher, and ratio of Teacher Per Other Staff as staffing mix variables. If these were significant more detailed analysis would be carried out later.

c. Qualification of staff

The budget proposals usually included resumes of the project coordinator and sometimes key staff members. It was decided not to attempt to quantify these resumes for reasons given above. All staff members were required to meet minimum NYC teaching requirements.

2. PROCESS VARIABLES

As pages 7 & 8 of the Project Summary show, there was a great deal of variety in the course offerings of the various programs. Each program appeared to be individually based upon the needs of the students and the availability of staff and resources. The offering of key-punch at D for example, would seem to be based upon the availability of key-punching machines in the regular school. This is an indication of another book-keeping difficulty. It is doubtful that the bilingual program paid rent for use of these machines. Thus, these students benefited from non-title I resources that are not accounted for in the programmed budget. That this was good for the students, there can be no doubt, but it is to be expected that similar situations occurred with each program, once more, making comparative analysis of input and output difficult.

As was explained above, comparative data on actual classroom processes or comparative data on material actually covered were not available. This lack of information is possibly the most critical lack in the reporting procedure. When combined with the paucity of information as to the actual students who received the program, it becomes almost impossible to learn lessons from one school that might be applied in another. Recent research has shown that different types of students do respond differently to various methods of teaching. What method or methods would be best for bilingual students? Would different methods appeal to students of different cultures, SES within cultures, of different ability, of different achievement levels? The answer to these and similar questions cannot even be guessed at from these reports. Yet, there are few questions of greater importance.

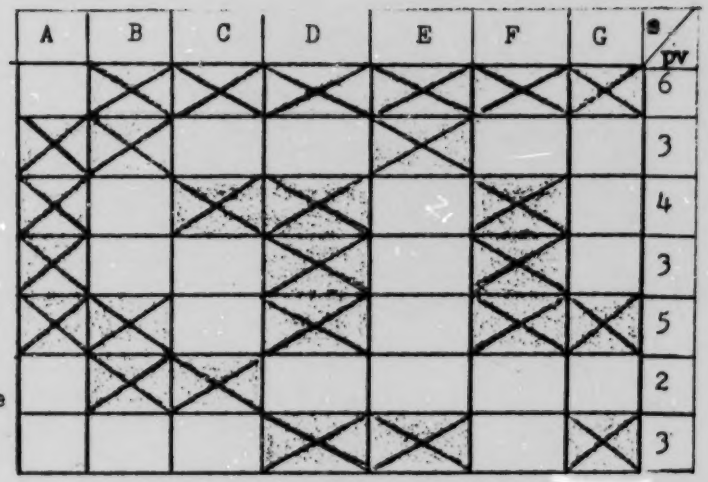
The curriculum variables of this class are all given as dicotomous. Only the existence or non-existence of an item is shown. The number of offerings in a particular school is then divided by the number of offerings in all schools to form a concentration index. The smaller the result the more the resources are "concentrated" in a few areas.

	A	B	C	D	E	F	G		
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	$\bar{x}$	σ
Core Curriculum Base : 15	4/27	6/40	8/53	7/47	8/53	5/33	5/33	41	10.40
Elective Courses Base : 13	3/23	4/31	2/15	7/54	0/0	0/0	0/0	18	20.29
Core & Elective Base : 28	7/25	10/36	10/36	14/50	8/29	5/18	5/18	26	14.22
Extra Time (Summer,Tutoring, Evening) Base : 6	0/0	0/0	3/100	0/0	1/33	0/0	1/3	24	37.06
Special Activities (Trips,Clubs,etc..) Base : 6	0/0	0/0	0/0	1/17	2/33	1/7	5/83	1.29	1.80
Adult Education Base : 1	0/0	0/0	1/100	0/0	0/0	0/0	0/0	-	-
Concentration Index Base : 66	14/21	20/30	24/37	29/44	19/29	11/17	16/24	29	9.34

These key variables do not show what took place within the program but they do measure the width and depth of what the various program attempted to do. It was not possible to cost these variables out using information given in the program budget or the evaluation report.

REPORTED PRODUCT VARIABLES

1. Attendence
2. Examination Grades in Subject Areas
3. Inter American Series (Pruebas de Lectura)
4. NYC Language Fluency Test
5. Stanford Achievement Test
6. Test of Proficiency in the English Language
7. Miscellaneous Tests



s : School
pv : Total Reported Product Variables

a. Attendence

School	Bilingual N	Bilingual %	Regular N	Regular %	test	P ≤	
A	479	93	3461	73	Z= 2.90	5/10,000	number of tails not shown
B 9th	-	80.71	-	76.46	.99	NS	
10th	-	84.02	-	78.30	2.14	.05	t improper test Tests means not proportions
C	-	78.59	-	59.07	?	.01	test used not shown
D	240	83	-	65	Z= 5.16	.05	two tail test used
E	Attendence improved 2% from fall to spring					.05	test used not shown
F	-	96.80	-	68.50	t= 15.48	.001	t improper test
G	195	86	3800	71.50	4.611	-	not clear whether Z or t was used

The most common product was average daily attendence expressed as a percent. There was no set format for showing attendence or calculating its significance,and it is not sure whether the figures are comparable. Also the relative improvement of attendence when programs are compared with parent schools may be misleading. Truants were not allowed in the bi-lingual programs but they may or may not have been discharged from the parent school.

A possible method of comparing attendence between schools might be to compare the difference between program attendence and parent school attendence. The validity of this measure is indicated by the fact that program attendence and parent school attendence have a correlation coefficient of only .19 ($r^2 = .04$) thus indicating the presence of other factors than parent school population as explainers of program attendence.

	A	B	C	D	E	F	G
Net Improvement %	20	4.25	5.72	18.00	28.30	14.50	not given

$\bar{X} = 15.38$
$\sigma = 9.20$

It may have been due to merely being more efficient in weeding truants from the program but some schools were remarkably superior to others in improving program attendence over parent school attendence.

When ADA is considered as a process variable, it exercises a powerful affect on such measures as cost per student ADA, student ADA/staff,etc.. Whether viewed as a means to cognitive achievement or a measure of affective achievement the ability of a program to improve students attendence is highly suggestive of the ability of a program to achieve what it is paid to do.

b. Interamerican Series

The Inter-American Series (Pruebas de Lectura) was used in four of the seven schools. Three of these reported raw scores. The fourth reported grade equivalent. The three schools reporting raw scores are shown below.

	$\bar{X}$ Pre-Test	$\bar{X}$ Post-Test	Δ	$\left(\frac{\Delta}{\text{Pre-Test}}\right) * 100$
C	56.37	75.87	19.50	35 %
D	28.26	39.47	11.21	43 %
G	37.65	52.01	14.36	38 %

$r_{pretest} = .9986$ ($r^2 = .9973$)

A correlation coeffected for pretest scores and improvement shows that 99.7% of improvement can be "explained" by pretest score. The higher the pretest score the more improvement shown in absolute terms, the least in relative growth terms.

$$t = r\sqrt{(n-2)/(1-r^2)} = 19.22 \ (p \leq .01)$$

This finding is significant and indicates that it would very likely hold for the other programs were the test to administrated. It also indicates that the programs listed above were equally effective in assisting student progress once beginning level was held constant.

Even though the standard deviation of the pre-test is not given, the magnitude of the increase makes it reasonable to assume that the growth was greater than 1/3 of a standard deviation and thus is educationally significant.

Since variation in product did not exist to compare with input and process variables no further analysis of this variable was made.

INTER-AMERICAN SERIES (Pruebas de Lectura)
Vocabulary and Reading Comprehension

School	Total (1)	Total (2)	Score Type(3)	Pretest			Posttest			Statistical Data	
				Date	Mean	S.D.	Date	Mean	S.D.	Test	Value
A	460	-	1	10/75	6.05	-	5/76	7.83	-	t	17.03 P≤.05
C	295	95	6	10/75	56.37	21.88	5/76	75.87	21.77	t	15.22 P≤.01
D	250	212	6	10/75	28.26	-	5/76	39.47	-	t	16.696
G	150	Not used (Italian)									
E	400	Not used (Chinese)									
F	250	185	6	10/75	37.65	-	5/76	52.01	-	t	18.586
B	150	Not used (Spanish)									

(1) Total number of participants in the activity.

(2) Total number of participants for whom both pre and post test data are provided.

(3) 1 = grade equivalent; 6 = raw score

c. EXAMINATION GRADES IN SUBJECT AREAS

Three of the seven schools: A, B, F used class grades in the bilingual subject areas to measure achievement. A and B used a criterion that 60% of the bilingual students would obtain a 60% or better on the final examination given in class. Neither school states whether the same examination was given to students taking the same subject in the English program and thus, the bilingual students cannot be compared with their English speaking peers. Nor, since different tests were administered in different schools can the programs be compared with each other.

F compared the percentage passing the final examination in the bilingual program with those passing the final examination in the regular program. Once more, the comparability of the examination is not given and the above qualifications apply. The differences between the achievement of bilingual and regular students is enormous. Possible explanations include the program itself, cultural characteristics of the Chinese students in the program and/or easier finals in the bilingual program. Studies have also shown that higher grades are given by teachers to students with values similar to their own. Teachers in a bilingual program may share their students values to a higher degree than is true of teachers and students in the English program. These results are impossible to verify as the F evaluation report did not include a single test used by other schools. Each of its instruments-except atttendence-was home made. The attendence reate of 97% within the program as opposed to 69% within the parent school does indicate that there is some ground to suppose that the difference in final examination grades might be jsutified.

One school, G, compared its 95 bilingual General Science students with

a random sample of 95 regular students and than applied a t test, the significance of which is not recorded. G was also the only school to use a city-wide final examination.

As only three of the seven schools reported this item and as the results were not comparable among programs or between program and parent schools, these examinations could not be used in further analysis.

d. NYC LANGUAGE FLUENCY TEST (PUERTO-RICAN RATING SCALE)

This is one of the most controversial of the rating instruments. It has a high reliability when used by experienced teachers working with student populations which are distributed normally and have fairly common means and standard deviations. It has a low reliability when used by untrained personnel or when fairly divergent student populations are involved. In other words, its reliability within a school is greater than its reliability between schools. The statement that two students within the same school are rated C gives us more information than the statement that two students in different schools are rated C.

A major cause of the difficulty of administering the scale is the fact that it is an ordinal scale-not an interval scale. The interval betweenE andF is much smaller than the interval between B and C.

The schools examined attempted to deal with the problem in two ways. The first was to set a simple criterion: "Seventy percent of students will improve one level or more." The difficulty with this approach is that schools with large numbers of E and F students will do very well, while many B heavy schools will show little or no improvement. At A the percent of students advancing one level or more was inversely related to the level at which they began.

Beginning Level	B	C	D	E	F
% advancing one level or more	0	34	48	62	96

Two schools, D and F, attempted to avoid this difficulty by using the Wilcoxon Matched-Pairs Signed Ranks test. A simple Sign Test would have been mere appropriate as the prior test assumes an equal interval scale

but the Z found by either method is so large that the differences between the two tests are minimal.

	Gain	Loss	Same	R	P
A	258	33	165	11.57	.05
D	223/215	3/2	36/45	-12.7 -12.6	.05
F	75/77	8/8	22/22	6.5 6.6	.05

Four schools did not report this test. The relative flatness of results combined with the difficulty of using this test for comparisons between schools and the fact that only three schools reported it precluded its further use.

e. THE STANFORD ACHIEVEMENT TEST

The SAT has an interesting history. When the Federal funds were granted, a requirement was made that a standardized test with national norms be given as a pre-test and post-test in the ESL component. Several tests were investigated and finally the SAT Primary versions II and III were chosen, largely because they contained a section on listening comprehension. The test was normed on elementary school children and the interest level of the questions was also geared to elementary school minds. The author still recalls with mixed emotions reading a group of young toughs (almost the whole group was in trouble with school or police during the year) a selection that concerned itself with a boy and girl and their big or small, red or blue balls.

It was speedily discovered that using grade equivalents normed on elementary school populations for high school students was not only useless but misleading and schools were ordered to report not grade equivalents but raw scores. It was a shock to discover that the five schools who reported this test all used grade equivalents. This means that the scale used is not an equal interval scale and non-parametric formulas that take this into account should be used in making comparisons.

Yearly meetings to discuss test results ritually begin with complaints that the test is irrelevant to what is taught in the classroom and terminate with the reply that the test is the best of a bad lot and besides, "it is necessary to get us funded." For reasons of invalidity, irrelevance, and difficulties caused by lack of ordinal scale it might be best ignored but since it is mandated, it was reported by five of the seven schools, and following the dubious theory that "bad data is better than no data as

long as you know it is bad data" the following analysis was made.

School	Form	Pretest	Posttest	Pretest Rank	Posttest Rank	d^2
A	II	1.60	2.01	7	7	0
	III	2.33	2.74	4	5	1
B	II	2.57	2.77	3	4	1
	III	2.36	2.73	6	6	0
C	?	-	-	-	-	-
D	?	2.58	3.02	2	2	0
G	?	4.30	4.48	1	1	0
E	?	-	-	-	-	-
F	?	2.33	3.01	4	3	1
						$\Sigma = 3$

As can be seen, A and B report the form used while D, G, and E do not. Grades 2.0 to 2.6 fall within the purview of both form II and III and thus it is difficult to estimate which form was used. In order to be useful, the non-parametric Spearman Rank Order Correlation Coefficient requires at least four cases.

The question of comparability may be dodged by assuming, as the test salesmen claim, that the forms are made so that the same same student would get a different raw score on each form but the grade equivalents would be the same. (This was not true when tested by author but that may have been a fluke).

Assuming this doubful assumption however a r_s was calculated ($r_s = .84$, $r_s^2 = .70$).

Even with all the dubious assumptions above, 70% of the posttest is "explained" by the pretest.

In view of the "softness" of the data and the smallness of the residue variation, it was decided not to make further use of this variable.

School	Total (1)	Total (2)	Score Type(3)	Pretest			Posttest			Statistical Data		
				Date	Mean	S.D.	Date	Mean	S.D.	Test	Value	P ≤
A	460	-	1	10/75	1.60	-	5/76	2.01	-	t	10.81	5/10,000(a)
					2.33	-		2.74	-		17.19	5/10,000(r)
B	150	34	1	10/75	2.57	-	5/76	2.77	-	t	.06	NS
		30			2.36	-		2.73	-		.07	NS
C	295	Not Given										
D	250	206	1	10/75	2.58	-	5/76	3.02	-	t	-13.52	NS
G	220	68	1	10/75	4.30	-	5/76	4.48	-	t	6.80	.01
E	400	Not Given										
F	250	93	1	10/75	2.33	-	5/76	3.01	-	t	17.798	NS

(1) Total number of participants in the activity.

(2) Total number of participants for whom both pre and post test data are provided.

(3) 1 = Grade Equivalent

(a) Auditory

(r) Reading

f. TEST OF PROFICIENCY IN THE ENGLISH LANGUAGE

Only two schools reported this measure. As raw scores were used, they were comparable on an interval scale. B showed no significant improvement while C did. These two schools could be compared for input variances that might explain the difference but with only two cases such inferences as as might be drawn would be only indicative. It is worth noting that on this test:

	Pretest	Posttest	Δ
B 9th	144.06	154.03	9.97
10th	120.11	143.32	23.21
C	115.36	139.61	24.25

$r_{pretestxDelta} = -.99598$ ($r^2 = .99198$)

Ninty nine percent of the posttest is "explained" by the pretest score leaving only 1% to be explained by variation in program. This variable was also discarded as a possible measure of program variation.

TEST OF PROFICIENCY IN THE ENGLISH LANGUAGE

School	Total (1)	Group ID(2)	Total (3)	Score Type(4)	Pre-Test			Post-Test			Statistical Data	
					Date	Mean	S.D.	Date	Mean	S.D.	Test	Value
A			Not Given									
B	150	9th	35			144.06	-		154.03	-		..49NS
		10th	38	6	10/75	120.11	-	5/76	143.32	-	t	1.33NS
C	295	-	94	6	10/75	115.36	43.44	5/76	139.61	43.22	t	15.22 P ≤ .01
D	250	-	Not Given									
G	150		Not Given									
E	400		Not Given									
F	250		Not Given									

(1) Total number of participants in the activity.

(2) Identify the participants by specific grade level.

(3) Total number of participants for whom both pre and post test data are provided.

(4) 6 - raw score

g. MISCELLANEOUS TESTS

D, G, and E all used objectives and instruments specific to their schools.

D used a cultural inventory and three attitude tests. G used an Italian test and the Metropolitan Achievement Test in Arithmetic (average gain 1 year, $P < .01$), and E used interviews (students, ESL Teachers, Bilingual Staff), classroom observations, and student activities. The results are not comparable across schools and could not be used as measures of program variation.

B. SIGNIFICANT RELATIONSHIPS

The original intent of this section was to compare the main variation in output with the input variation and/or process variation and attempt to uncover significant relationships. The relative lack of variation in post-test scores after pre-test scores are factored out combined with the lack of comparative process information within or between schools would appear to render such an approach rather futile.

This does not mean that the programs were ineffective in accomplishing their goals. It does mean that they were equally effective in accomplishing their cognative goals as measured by the tests used. As comparative scores are not available (the available scores are not comparable) for program and parent school we cannot compare cognative goal achievement between them. The unreliable evidence that we have indicates that the programs are more effective than the parent schools. In no case does the available data indicate that program cognative development was inferior to the parent schools in any measured product variable.

In almost every program children showed growth as witnessed by almost every program variable measured.

When student ADA is used as a measure of affective goal product however it does become possible to compare it with various inputs.

STUDENT ATTENDENCE CORRELATION TABLES

Correlated With	1. % Attendence*				2. % Difference**			
	n	r	r^2	Sig.***	n	r	r^2	Sig.***
3. Enrolled Students	6	.76	.58	.05	6	.72	.52	.05
4. Staff	4	.37	.14	NS	4	.35	.12	NS
5. Teachers	6	.22	.05	NS	6	.21	.04	NS
6. Paras	6	.16	.03	NS	6	.16	.02	NS
7. Classroom Staff	4	.16	.03	NS	4	.15	.02	NS
8. Teachers Staff	4	.16	.02	NS	4	.15	.02	NS
9. Enrolled Students Staff	4	.16	.02	NS	4	.15	.02	NS
10. Enrolled Students Classroom Staff	5	.17	.03	NS	5	.17	.03	NS
11. Enrolled Students Teachers	5	.18	.03	NS	5	.18	.03	NS
12. Guidance Councilors	6	.15	.02	NS	6	.15	.02	NS
13. Enrolled Students G. Councilors	6	.09	.01	NS	6	(.09)	.01	NS
14. Family Workers	6	.23	.05	NS	6	(.15)	.02	NS
15. Enrolled Students Family Workers	6	(.30)	.09	NS	6	(.24)	.06	NS
16. Dollars Enrolled Students	6	(.67)	.45	NS	6	(.76)	.58	..05

* % Student Daily Attendence

** % Difference between Program and Parent School ADA

*** Significance

Analysis: As number of enrolled students increases, % student ADA increases.

These coefficients present a remarkably uniform picture. The number of staff explained about 14% of variation among programs. Number of teachers explained about 5% and other staff members by category explained somewhat less.

It is interesting to note that number of teachers explained more of the variation when it stood alone than it did when combined with para-professionals but total staff was much more influential than any of its components. There seem to be a number of relations here that might be of great importance if we only had product data to compare them with.

We also tend to think of these programs as having a high staff to student ratio yet while in 75-76 the city-wide student/teacher ratio was 30/1; school A had a student/staff ratio of 42/1 and a student/teacher ratio of 115/1. School A also had the highest student ADA of any school in the program. Were there non federally funded resources available to school A that did not appear on the budget? If not, what was the secret that led to high student/staff ratios and high attendence? From these reports we will never know.

Correlations 3 and 16 are converse relationships. Programs with large enrollments tended to spend less per student and also tended to have better attendence. There would seem to be fixed "start up" or capital investments cost associated with programs regardless of the number of students serviced and economies of scale appear to accrue to the larger programs. There may also be diseconomies of scale but these are not yet evident in the data shown.

The variables list thus collapses to two variables, student enrollment and number of staff. A multiple linear regression yielded the following

correlation coefficient.

	A	B	C	D	E	F
X # of staff	11	12	not given	9	not given	10
Y # students	460	150	-	250	-	250
Z % Daily Attendence	93	82	-	83	-	86

($r = .98$; $r^2 = .96$)

($t = 8.5298$ $P \leq .0006$)

Tt appears that the size of the program in terms of staff and students explains 96% of variation in percent daily attendence with the larger programs having the best attendence.

C. FINDINGS OF FACT

1. Report Format

1. Funding and evaluation reports were filled separately and were apparently not meant to be used together.

2. Several sections of the funding proposal (e.g. Relative Need) did not describe the program being funded but were identical word for word across programs.

3. The target population for each program was identified only in general terms. There was no general needs assessment or criterion testing of the actual students in program to determine placement or assigned curriculum.

4. The budget gave a detailed picture of staffing mix, some staff resumes, and curriculum. This information was not always included in evaluation.

5. Neither report described classroom process variables in quantifiable terms.

6. Neither report detailed non-federal resources available to program students.

7. Each program set its own goals in conjunction with its evaluation. These goals were not always comparable among programs or between program and parent school.

8. The pre and post-test measurements made were not comparable among programs or between program and parent schools.

9. The goals chosen and evaluated did not always match or explain staffing mix, curriculum, or special offerings.

2. Variables

1. Student ADA was used as a context, process and product variable.

2. No single product measure was used in all seven schools studied.

3. No information concerning student selection process for program was given.

4. No information concerning student progress before entering program was given.

5. No information concerning classroom processes was systematically reported.

6. Total personnel costs amounted to some 93% of total funds expended.

7. Direct personnel costs averaged 27% of the budget for teaching staff and 37% of the budget for non-teaching staff.

8. Staffing Mix and program structure differed considerably from school to school.

9. Most of the staffing variations were in the non classroom areas.

10. A concentration index varied from 17 to 44 on a scale of 100. ($\bar{X} = 29$, $\sigma_X = 9.34$)

11. There was a small correlation between program student ADA and parent school ADA. ($r = .19$; $r^2 = .04$)

12. Reported subject examination results were not comparable among programs or between programs and parent schools.

13. For the three schools reporting them, Inter-American Series post-test scores were strongly "determined" by pre-test scores.
($r=.9986$; $r^2=.9973$)
($t=19.22$; $p < .01$; $n=2$)
No comparisons were available for comparable students who were not in program.

14. Had standard deviations been reported the growth registered by the test would probably have been highly significant <u>educationally</u>.

15. The above schools showed considerable achievement in both absolute and percentage terms.

16. Data on the NYC Language Fluency Test was not comparable among programs or between program and parent school.

17. The softness of reporting proceedures used in evaluations made it impossible to compare Stanford Achievement Test scores across programs.

18. There was a high correlation berween pre- and post-test scores for the two schools which reported the Test of Proficiency in the English Language.
($r = -.99598$; $r^2 = .99198$)

19. The lower the pre-test score the greater the absolute and percentage gain on the above measure.

20. Since pre-test standard deviations were not reported it was not possible to determine if gains were educationally significant.

21. The size of the program in terms of students and staff "determined" 96% of the variation in Student ADA.
($r = .98$; $r^2 = .96$)
($t = 8.5298$; $P \leq .0006$)

22. In almost every program children showed obvious growth as witnessed by almost every program variable measured.

V. CONCLUSIONS AND RECOMMENDATIONS

I. The reporting system as exemplified above does not permit comparisons between programs or between parent school and programs to be made.

A more useful proceedure might be to consolidate various reports in one file. These might include:

A. A budget proposal showing both Tax Levy and Federal Funding resources available and the manner in which they will be allocated.

B. A pre-assessment giving context and presage variables describing student and faculty characteristics with special emphasis upon those variables which are of main concern. This section might reasonably be expected to contain such information as:

1. Reason for student selection
2. Method of student selection
3. Student Achievement at time of selection
   a/. Criterion based
   b/. Comparable with other programs.
   c/. Comparable with non-selected students in parent school
4. Relevant information concerning student academic history
5. information concerning SES, attitude, cultural background, etc. that is considered relevant to future achievenent
6. Similiar information on staff

C..A Process Document describing

1. Goals the program desires to accomplish based upon analysis

of needs assessment.

2. Specifies methods (process) that are expected to lead to goal accomplishment.
3. Periodic (monthly?) reports monitoring and providing feedback to ensure that the processes are indeed being implemented and to report changes as they occur.
4. A summary section recapitulating what was done with special emphasis on experience that would be useful to other programs or this program in the future.

D. A post-assessment which measures goal accomplishment in a manner that can be compared across programs, between program and parent school, and which specifically links input, process, and product variables.

II. There is always a conflict between control and creativity. As the programs are now structured there is great independence among the programs. Anyone who has seen any of them cannot help but be greatly impressed by the dedication, effort, morale, and feeling of accomplishment that pervades these programs. In a city school system that is often used as a model of urban decay for the nation these programs shine as beacons, demonstrating what education can and should be like. When the author chose the bi-lingual programs to study, he was choosing programs he believed and believes to be among the best the city has to offer.

The reporting system above does not do these programs justice. The price of creativity in reporting is a lack of comparability of

results. Everyone connected with the programs is aware of their value. But can that value be proven? Using the data presented above it cannot.

Can lessons learned in one program be applied to another? Using the data above they cannot.

Can a program evaluate itself to determine more efficient, effective methods of combining inputs and processes to increase student achievement? Using the data above it cannot.

For these reasons and others, a common reporting system must be developed. Each program should be free to determine its own direction, subject to funding approval, and each should be free in the choice of the processes and budget allocation that it feels is best to accomplish its goals. But the measurement of these goals should be standardized.

There is no reason that attendence should be reported one way in six schools and a second in the seventh. There is no reason why significance of attendence should be reported five different ways in seven schools. There is no reason why when seven schools were asked to report the SAT, only five did so, three failed to specify the form used and not one reported raw scores as requested. The evaluators have shown great industry and intelligence in their reports. Their reports are the work of dedicated professionals. That of school A especially is a classic. Yet, they suffer from the lack of a common procedure and yardstick that would make their work comparable.

A manual of evaluation procedures, including statistical tests to be used, should be written and followed.

III. Since the Colman Report educational literature has been filled with the observation that "nothing we do makes any difference", class size, teacher experience, the size of the library, degree of integration-indeed most of the variables under the schools control have been viwed as discarded by one report or another as failing to make a significant difference. While Christopher Jencks limited his discussion to the failures of the school to terms of "relative" inequality, authors such as Ivar Berg have suggested that schools serve mainly to give credentials rather than education.

One school of thought has questioned whether this inability is due to a lack of program implementation. Certainly, reports such as those reviwed here lack data as to implementation, but there is another possibility as well. The evaluation procedure itself may not be equipped to measure results even when they occur. The more creative and innovative the project, the less likely its results are to be measured and reported. Let's take another look at the bilingual programs. One of their major functions is to provide foreign born students with the language and cultural skills needed to function in American society. Yet, not one school reported on the number of students who "graduated" into the regular program let alone presented follow-up studies comparing their progress with that of native born peers and/or that of similar students who did notcome through the program. In the author's school three of the last five student body presidents came from the biligual program and they did it in a school where their ethnic group is a definite minority. This fact was never reported. The reason? No one ever

asked. An instrument to measure achievement of this central goal was never devised.

A Senator seeking information about its accomplishment in the author's school would be told that no evidence existed that the program had any impact. Measures of goal accomplishment must be developed and utilized across schools and across programs.

IV. It may be argued that this will place extra burdens upon program administration. There are various response that can be made to such a point of view.

A. Administrators are paid to set goals, allocate resources, monitor progress, feedback corrections, evaluate accomplishment and set new goals, etc.. To do all this they need accurate data. A system that provides such data will be a benefit and not a hindrance.

B. The programs are already heavy in terms of non teaching personnel. Improved efficiency might make it possible to use personnel more effectively.

C. Much of this evaluative work could be done by universities and/or students on internships or action orientated scholars.

D. Cross fertilization of ideas should be encouraged by letting people work in various programs throughout the city. Teachers and administrators should have observation days to visit other programs and learn from them. Report of their outside observations might be included in the process reports.

Efforts should be made to increase the data input available to administrators from peers and sources outside and inside the system.

E. Attendence statistics indicate that some of the smaller programs are below optimum size. Consolidation of some existing programs would free resources for research and evaluation.

V. There is adequate reason to believe that the programs are effective that they accomplish the goals they were funded to accomplish. There is no evidence that they are doing so in an efficient manner, that resources are being utilized to maximize the impact of each dollar spent. It is an axiom in production engineering that the opportunity for improving efficiency varies with the amount of variation in product cost or quality. Considering the variance in cost per student among the five schools there should be great opportunity to improve program efficiency. Increasing efficiency should be a priority goal in planning and evaluation.

VI. The administrator should evaluate the usefulness of all data developed. Data should only be gathered on inputs, processes, and outputs that are instrumentally related to the goal achievement of either the project or the system of which it is a part. This means that specific measures will change from year to year, and program to program. A difference that makes no difference is no difference. At the present time we do not know what differences make a difference. Discovering significant differences. reporting them, and manipulating them to make a difference in student achievement is an administrator's first concern.

The present reporting system does not do this. A system must be developed which does.

APPENDIX A

Definitions

APPENDIX A1

DEFINITIONS

I. GENERAL

1. The Universe of discourse shall include all teaching variables. It possesses the logical relation of being all inclusive.
   Symbol: U

2. Classes: These variables shall all be contained in four mutually exclusive classes.
   Symbol: 1 (Presage)
   2 (Context)
   3 (Process)
   4 (Product)

3. Set: A set consists of any collection of variables. A set may contain all, some, or none of the variables in U. A set need not be be bounded by class. A set may contain other sets. Sets will be individually defined and named.

II. RELATIONSHIPS

1. Logical Relations: Those dealing with inclusion and exclusion. These relations shall include but not be limited to definition.

2. Statistical Relations: These relations shall deal with implication. Distinct statistical relations are defined as follows.
   a. Correlation exists when sets of variables vary relative to each other in a predictable manner. Correlations will always be reported with information sufficient to judge significance and replicablity of statistic. Correlations are usually based upon observation and need not be confirmed by experiment.
   Symbol: 1r2 If a direct relationship is hypothesized the independent variable may be written first but the r serves as a reminder that there is no experimental evidence to confirm the existence of such a relationship

   b. Direct Relationship is defined in terms of dependent and independent variable sets. It must be confirmed by experimental evidence. ($1.2 \neq 2.1$)
   Symbol: 1.2 - The independent variable is listed first with the dependent immediately following a period.

   c. Indirect Relationship occurs when an intervening variable set is considered to be dependent upon the independent variable set, yet acts as an independent variable set upon a set of dependent variables. Sincethis is an expanded form of direct relationship it can only be confirmed by experimentation.
   $(1.2).3$ may equal $1.(2.3)$ - $(1.2)\text{-}3 \neq 1.(2\text{-}3)$
   Symbol: 1.2.3

APPENDIX A2

DEFINITIONS (continued)

d. Compound Variation occurs when two or more sets function as independent or dependent variable sets relative to a third set. It may be indirect or direct.

Symbol: (1r2).3 Set three is dependent upon correlated sets 1 and 2.

1.(2r3) Mutually correlated, sets 2 and 3 are dependent upon set 1.

(1,2)3 Set 3 is dependent upon mutually unrelated sets 1 and 2.

etc...

e. Mutual Interaction occurs when related sets simultaneously (true mutual intereaction) or over time (feedback) act as both independent and dependent variables relative to each other.
Symbol: 1-2 (Note: 1-2 = 2-1)

f. No Relation occurs when no relation can be found.
Symbol: 1,2

III. DERIVED CATEGORIES

1. Cluster: A cluster is a set of variables related by correlation.

2. Group: A group is a set of clusters which are also related by direct or indirect variation.

3. System: A system is a set of groups which are also related by the process of mutual interaction or feedback. To be a member of a system each variable must directly or indirectly affect and be affected by each of the other variables within the system. A variable which affects the system but is not affected by it is an INPUT to the system. A variable which is affected by the system but has no affect upon it is an OUTPUT of the system.

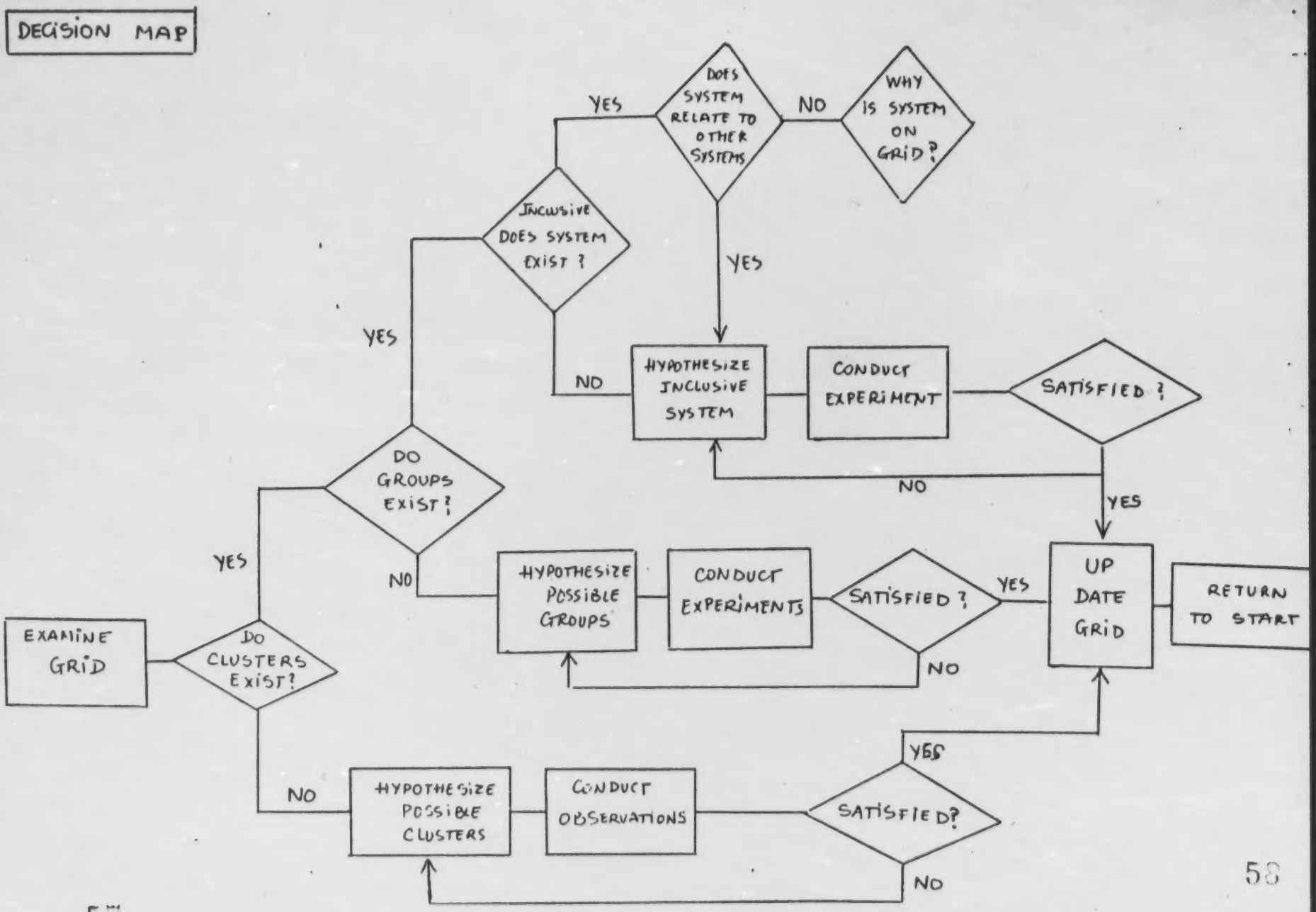
Note: Groups and systems must be proven to exist by experimentation, only the existence of clusters can be confirmed by observation.

Groups, systems, and clusters may or may not be bounded by class.

Since sets are defined on the basis of the variables they contain the same laws which apply to a set also apply to variables within it. Thus the grids that will be formed will apply not only to the variable classes but also to sets of variables within those classes.

APPENDIX B

Decision Map


DECISION MAP
DOES SYSTEM RELATE TO OTHER SYSTEMS
YES
NO
WHY IS SYSTEM ON GRID?
INCLUSIVE DOES SYSTEM EXIST ?
YES
YES
NO
HYPOTHESIZE INCLUSIVE SYSTEM
CONDUCT EXPERIMENT
SATISFIED ?
NO
YES
DO GROUPS EXIST?
YES
NO
HYPOTHESIZE POSSIBLE GROUPS
CONDUCT EXPERIMENTS
SATISFIED ?
YES
NO
UP DATE GRID
RETURN TO START
EXAMINE GRID
DO CLUSTERS EXIST?
NO
HYPOTHESIZE POSSIBLE CLUSTERS
CONDUCT OBSERVATIONS
SATISFIED?
YES
NO

APPENDIX C

Sample Proposal Table of Contents

Sample

Proposal Table of Contents

I Application

II Project Approval Information

III Budget Information
- Certification Signatures for Joint Application
- Supplementary Questionaire
- Enrollment Data
- Proposed Project Participants

IV Program Narrative

1. Relative need for assistance
   - i. Geographic Distribution in the State
   - ii. Relative Need in Different Areas
   - iii. Previous Assistance
   - iv. Need for Additional Demonstration
   - v. Relative Intensity of Educational Needs

2. Target Population and Program Objectives
   - i. Identification of Needs
   - ii. Objective Data
   - iii. Statement of Objectives for a Five Year Program

3. Results or Benefits Expected
   - i. Evaluation
   - ii. Dissemination

4. Approach
   - i. Activities
   - ii. Use of Educational Resource
   - iii. Parent and Community Involvement
   - iv. Concentration
   - v. Program Administration
   - vi. Resource Management
   - vii. Continuation

5. Staffing
   - i. Staffing Plan
   - ii. Training
   - iii. Staffing Qualification

APPENDIX D

Program Budget Highlights

NATIONAL | 48 902 EYE EASE 48 702 20/20 BUFF

APPENDIX D1

School A

		1	2
1	Federal Funding Requested		220,000.00
2	Population		460
3			
4	**Budget Categories**	**Bil. Prog.**	**Bil. Training**	**Totals**
5	Personnel	129,784.00		129,784.00
6	Fringe Benefits	6,228.00		6,228.00
7	Travel	1,035.00		2,035.00
8	Equipment	-	-	-
9	Supplies	7,245.00	194.00	7,439.00
10	Contractual	500.00		500.00
11	Other	3,000.00	18,585.00	21,585.00
12	Total Direct Charges	187,792.00	18,779.00	206,571.00
13	Indirect Charges	12,208.00	1,221.00	13,429.00
14	Totals	200,000.00	20,000.00	220,000.00
15				
16	**Budget Explanations**			
17	Personnel			
18	Projector Director (1)		24,680.00	
19	Guidance Counselor (1)		21,978.00	
20	College/Vocational Adviser (1)		14,000.00	
21	Bilingual Content Area Specialists (2)		24,000.00	
22	Bilingual Specialists (2)		28,000.00	
23	Bilingual Secretary (1)		7,776.00	
24				120,434.00
25	Teacher-Aide (1) (6hours per day)		6,234.00	
26	Teacher-Aide (1) (3hours per day)		3,116.00	
27				9,350.00
28	Fringe Benefits			
29	Social Security :			
30	Professional		5,966.00	
31	Para-Professional		547.00	
32				6,513.00
33	Retirement		31,195.00	
34	Maximum Annuity		800.00	
35	Health		3,800.00	
36	Welfare (8 x $400)		3,200.00	
37	(2 x $360)		720.00	
38				39,715.00
39				
40				

45-802 EYE EASE
45-702 20/20 BUFF

APPENDIX D1 (cont.)

School A

	1	2
In-Service Training		
Tuition (NYU)	10,560.00	
(Hunter)	2,400.00	
Teacher Workshops	4,125.00	
Consultants	1,500.00	
Teacher Training Materials	194.00	
Total	18,779.00	
Indirect Cost (6.5%)	1,221.00	
Totals		20,000.00
Supplies-Instructional		
Textbooks (Soc. Studies, Science, Lang.)	2,555.00	
Instructional Supplies (Maps.,)	1,895.00	
A.V. Supplies	1,655.00	
		6,105.00
Travel - Related Expenses		
Local Travel	50.00	
Project Administration	54.00	
Project Administration	134.00	
Conferences	209.00	
Conferences	300.00	
		747.00
Related Exp. Travel (Perdiem Expenditures)		
Bil. Conferences	144.00	
Project Director CA	108.00	
TESOL Convention	36.00	
		288.00
Evaluation		3,000.00
Supplies		
Office Supplies	898.00	
Stationery	142.00	
Postage	100.00	
		1,140.00
Contractual Services (Telephone)		500.00
T OTAL DIRECT CHARGES	187,792.00	
TOTAL INDIRECT CHARGES	12,208.00	
PROGRAM COST	200,000.00	
TRAINING COST	20,000.00	
GRAND TOTAL		220,000.00

45-602 EYE-EASE
45-702 20/20 BUFF

APPENDIX D2

School B

		1	2
1	Federal Funding Requested		180,500.00
2	Population		150
3			
4	Budget Categories		
5	Personnel	120,124.00	
6	Fringe Benefits	34,812.00	
7	Travel	500.00	
8	Equipment	750.00	
9	Supplies	350.00	
10	Other	12,945.00	
11	Total Direct Charges	169,481.00	
12	Indirect Charges	11,016.00	
13	Totals		180,497.00
14			
15	Non-Federal Resources		
16	Tax LEVY (other source than State)	62,250.00	
17	STATE URBAN EDUCATION	129,852.00	
18	Totals		192,102.00
19			
20	Budget Explanations		
21	Personnel		
22	Coordinator (1)	19,980.00	
23	Bilingual Specialists (4)	48,000.00	
24	Guidance Counselor (1)	17,000.00	
25	Secretary Intern (1)	6,882.00	
26	Educational Assistant (4)	22,467.00	
27	Family Assistant (1)	5,795.00	
28	Totals		120,124.00
29			
30	Fringe Benefits		
31	Retirement	19,138.00	
32	Social Security	6,514.00	
33	Health	4,560.00	
34	Welfare	4,600.00	
35	Totals		34,812.00
36			
37	Others		
38	Textbooks	2,285.00	
39	Library	600.00	
40	Instructional Supplies	860.00	

45-602 EYE-EASE
45-702 20/20 BUFF

APPENDIX D2 (cont.)

School B

		1	2	
1	Office Supplies	350.00		1
2	Telephone	400.00		2
3	Postage	200.00		3
4	Local Travel	100.00		4
5	Out-of-Town Travel	500.00		5
6	Conferences and related expenses	300.00		6
7	Office Equipment (duplicator,,)	750.00		7
8	Tuition	5,200.00		8
9	Evaluation	3,000.00		9
10	Indirect Charges	11,016.00		10
11	Grand Total		180,497.00	11
12				12
13				13
14				14
15				15
16				16
17				17
18				18
19				19
20				20
21				21
22				22
23				23
24				24
25				25
26				26
27				27
28				28
29				29
30				30
31				31
32				32
33				33
34				34
35				35
36				36
37				37
38				38
39				39
40				40

45-602 EYE EASE
45-702 20 20 BUFF

APPENDIX D3

School C

		1	2	
1	**Federal Funding Requested**		223,240.00	1
2	**Population**		295	2
3				3
4	**Budget**			4
5	Professional Licensed:			5
6	Projector Coordinator (1)	20,000.00		6
7	Bilingual School Secretary (1)	12,450.00		7
8	Resource Teachers (3) (Spanish)	45,000.00		8
9	Resource Teacher- French - (1)	15,000.00		9
10	Resource Teacher -Italian- (1)	15,000.00		10
11			107,450.00	11
12	Para-Professional Personnel:			12
13	Full-Time Educational Assistants (3)	16,784.00		13
14	Part-Time Educational Assistants (2)	5,594.50		14
15	Part-Time Family Assistants (2)	5,594.50		15
16			27,973.00	16
17	Summer Component Workshops :			17
18	Resource Teachers	2,394.00		18
19	Educational Assistants	272.00		19
20	Secretary	874.00		20
21			3,540.00	21
22	Evening Component (Workshops for teachers and parents)			22
23	Resource Teachers	6,893.00		23
24			6,893.00	24
25	Orientation, Initial Coordination-Summer-			25
26	Resource Teacher & Coordinator	4,656.00		26
27			4,656.00	27
28	Fringe Benefits:			28
29	Retirement	29,753.00		29
30	Social Security	7,313.00		30
31	Health	3,800.00		31
32	Welfare	4,000.00		32
33	Summer Fringe - Educational Assistants	16.00		33
34			44,882.00	34
35	Supplies and Expenses:			35
36	General Supplies	500.00		36
37	Printing	100.00		37
38	Postage	200.00		38
39	Telephone	300.00		39
40	Travel Out-of-City	500.00		40

43-602 EYE-EASE
43-702 20/20 BUFF

APPENDIX D3
(continued)

		1	2
1	Conference Expenses	500.00	
2	Evaluation	2,000.00	
3	Local Travel	300.00	
4	Tuition	4,860.00	
5	Supplies, Materials for Training	580.00	
6	Training Textbooks, Library books, periodicals	601.00	
7	Audio-Visual Supplies for Training	200.00	
8	Substitute Coverage for Resource Teacher to		
9	attend conventions	280.00	
10	to attend TESL	140.00	
11	Audio-Visual Supplies	200.00	
12	Xerox rental	450.00	
13	Office and A.V. equipment	500.00	
14	Textbooks	700.00	
15	Instructional Supplies	445.00	
16	Program Cost	187,000.00	
17	Indirect Cost at 6.5%	13,000.00	
18	Program Total Cost	200,000.00	
19	Training Cost	21,730.00	
20	Indirect Cost at 6.5%	1,510.00	
21	Training Total Cost	23,240.00	
22	Grand Total		223,240.00
23			
24	A. Training : Summer Workshop, Summer Orientation,		
25	Evening Workshops, Tuition, Supplies, Textbooks,		
26	A.V. supplies, Substitute Coverage	21,730.00	
27	Indirect Cost	1,510.00	
28		23,240.00	
29	B. Material Development :		
30	Instructional Supplies	445.00	
31	A.V. Supplies	200.00	
32			
33	C. Dissemination :		
34	Xerox Rental	450.00	
35	Postage	200.00	
36			
37			
38			
39			
40			

APPENDIX D3

(continued)

		1	2
1	Summary of Budget		
2	Personnel	135,423.00	
3	Fringe Benefits	44,882.00	
4	Travel	500.00	
5	Equipment	500.00	
6	Supplies	2,595.00	
7	Evaluation	2,000.00	
8	Training	21,730.00	
9	Other	1,100.00	
10	Total Direct Charges	208,730.00	
11	Indirect Charges	14,510.00	
12	Totals		223,240.00

45-902 EYE EASE
45-707 20/20 BUFF

APPENDIX D4

School D

	1	2
Federal Funding Requested		192,388.00
Population		250.
Non-Federal Resources:		
Regular TAX-LEVY (other source than state)		198,456.00
Budget Categories		
Personnel	123,500.00	
Fringe	38,173.00	
Travel	1,000.00	
Equipment	1,550.00	
Supplies	8,025.00	
Other	8,492.00	
Total Direct Charges	180,740.00	
Indirect Charges	11,648.00	
Totals		192,388.00
Budget Explanation		
Professional Salaries		
Program Coordinator (1)	18,500.00	
Assistant Coordinator (1)	15,425.00	
Guidance Counselor (1)	20,647.00	
Bilingual Resource Teachers (3)	48,600.00	
Bilingual Secretary (1)	9,900.00	
		113,072.00
Para-Professionals	10,428.00	
		10,428.00
Fringe Benefits		
Social Security		
- Program Coordinator	825.00	
- Assistant Coordinator	825.00	
- Guidance Counselor	825.00	
- Resource Teachers (3)	2,475.00	
- Secretary	579.00	
- Para-Professionals (2)	610.00	
		6,139.00

45-602 EYE-EASE
45-702 20/20 BUFF

APPENDIX D4
(continued)

	1	2
Pension	25,464.00	
Health	3,240.00	
Welfare	3,330.00	
		32,034.00
Instructional Materials & Supplies		
Textbooks	4,300.00	
Instructional Supplies	1,000.00	
Thermofaxing Supplies	400.00	
Office Supplies	400.00	
Office Equipment	1,375.00	
		7,475.00
A.V. Equipment	1,100.00	
A.V. Supplies	1,000.00	
		2,100.00
Tuition - Staff Development		
Teacher Training	3,000.00	
		3,000.00
Other		
Parental Involvement	500.00	
Local Travel (family Assistants)	800.00	
Student Activities	2,992.00	
Dissemination & Postage	500.00	
Telephone	700.00	
		5,492.00
Travel and Related Expenses	1,000.00	
		1,000.00
TOTAL PROGRAM COST		180,740.00
INDIRECT CHARGES		11,648.00
GRAND TOTAL		192,388.00

45-602 EYE EASE
45-702 20/20 BUFF

APPENDIX D5

School E

		1	2
1	Federal Funding Requested		225,492.00
2	Population		400
3			
4	Budget Categories		
5	Personnel	135,613.00	
6	Fringe Benefits	33,548.00	
7	Travel	1,000.00	
8	Equipment	1,500.00	
9	Supplies	9,000.00	
10	Other	7,700.00	
11	Total Direct Charges	205,218.00	
12	Indirect Charges	13,242.00	
13	Totals		218,460.00
14			
15	Non-Federal Resources:		
16	TAX-LEVY, state	3,533,056.00	
17	other source	20,014.00	
18	Totals		3,553,070.00
19			
20	Budget Explanations:		
21	Personnel:		
22	Project Coordinator (1)	20,350.00	
23	Resource Specialist-Social Studies (1)	16,000.00	
24	-Sciences (1)	16,000.00	
25	-Math (1)	15,000.00	
26	Cultural Specialist (1)	15,000.00	
27	Guidance Counselor (1)	18,000.00	
28	School Secretary (1)	10,250.00	
29	Educational Assistants (3)	17,061.00	
30	Family Worker (1)	5,595.00	
31	Parent Language Trainer (1)	1,997.00	
32	Professional Trainees (6)	360.00	
33			
34	Fringe Benefits:		
35	Retirement	17,611.00	
36	Maximum Annuity	400.00	
37	Social Security	6,990.00	
38	Health	4,279.00	
39	Welfare	4,268.00	
40			

45-502 EYE-EASE
45-702 20-20 BUFF

APPENDIX D5

(continued)

	1	2
Supplies:		
Instructional Supplies	3,500.00	
A.V.	1,000.00	
Office	1,500.00	
Textbooks	2,000.00	
Library Resources	1,000.00	
Equipment:	1,500.00	
Other:		
Postage	500.00	
Telephone	500.00	
Local Travel	200.00	
Conferences & Related Expenses	400.00	
Parent Involvement	300.00	
Bus Trips	500.00	
Evaluation	4,100.00	
Admission Fees	200.00	
Travel (Out-of-Town)	1,000.00	
PROGRAMMING COST :		187,361.00
Training:		
Tuition	5,000.00	
Textbooks & Reference Books	1,000.00	
Supplies for teacher training	1,000.00	
In-Service , Pre-Service	3,000.00	
Teacher Trainers	7,857.00	
TRAINING COST :		17,857.00
TOTAL PROGRAM COST		205,218.00
INDIRECT COST	13,242.00	
GRAND TOTAL		218,460.00

45-602 EYE-EASE
45-702 20/20 BUFF

APPENDIX D6

School F

		1	2
1	Federal Funding Requested		207,500.00
2	Population		250
3			
4	Budget Categories		
5	Personnel	127,546.00	
6	Fringe Benefits	41,309.00	
7	Travel	2,500.00	
8	Equipment	1,344.00	
9	Supplies	8,539.00	
10	Other	13,680.00	
11	Total Direct Charges	194,918.00	
12	Indirect Charges	12,582.00	
13	Totals		207,500.00
14			
15	Non-Federal Resources:	NA	
16			
17	Budget Explanations		
18	Personnel:		
19	Professionals: Specialists (3)	57,000.00	
20	Guidance Counselor (1)	17,737.00	
21	Project Director (1)	19,526.00	
22	Secretary (1)	10,000.00	
23	Project Director (1) -July & August-	3,591.00	
24			107,854.00
25	Para-Professionals: Educational Assistants (3)	19,692.00	
26			19,692.00
27	Fringe Benefits:		
28	Professionals: Social Security	4,797.00	
29	Welfare	2,220.00	
30	Pension	28,870.00	
31	Health	2,160.00	
32			38,047.00
33	Para-Professionals:		
34	Social Security	1,162.00	
35	Welfare	1,020.00	
36	Health	1,080.00	
37			3,262.00
38			
39			
40			

45 602 EYE EASE
45-702 20/20 BUFF

APPENDIX D6
(continued)

		1	2
1	Equipment	1,344.00	
2	Supplies General	963.00	
3	Postage	100.00	
4	Telephone	250.00	
5	A.V.	1,275.00	
6	Textbooks	5,951.00	
7			9,883.00
8	Travel	2,500.00	
9			2,500.00
10	Other:		
11	Evaluation, Testing Materials	4,500.00	
12	In-Service Training	6,720.00	
13	Registration fees & Textbooks	780.00	
14	Home Visits	80.00	
15	Student Field Trips	1,600.00	
16			13,680.00

45-602 EYE-EASE
45-702 20/20 BUFF

APPENDIX D7

School G

		1	2
1	Federal Funding Requested		133,900.00
2	Population		220
3			
4	Non-Federal Resources		
5	Tax-LEVY regular		108,000.00
6			
7	Budget Categories		
8	Personnel	75,734.00	
9	Fringe Benefits	28,814.00	
10	Travel	800.00	
11	Equipment	550.00	
12	Supplies	7,717.00	
13	Contractual	1,500.00	
14	Total Direct Charges	115,115.00	
15	Indirect Charges	8,138.00	
16	totals		133,900.00
17			
18	Budget Explanations		
19	Personnel		
20	Bilingual Project Coordinator (Full-Time)	21,234.00	
21	Bilingual Math Specialist (1)	14,500.00	
22	Bilingual Science Specialist (1)	14,500.00	
23	Bilingual Social Studies (1)	14,500.00	
24	Bilingual Secretary (1)	11,000.00	
25			75,734.00
26			
27	Staff Training		
28	Consultant (1)	2,000.00	
29	Bilingual Project Coordinator (1) -Summer-	1,171.00	
30	Bilingual Specialists (3) -Summer-	1,596.00	
31	Consultant (1) -Summer-	750.00	
32	Tuition for teachers & Coordinator	5,680.00	
33			11,197.00
34	Fringe Benefits		
35	Social Security (5)	3,943.00	
36	Welfare (5)	2,000.00	
37	Pension (5)	20,971.00	
38	Health (5)	1,900.00	
39			28,814.00
40			

APPENDIX D7
(continued)

	1	2
Travel		
Conferences - Meetings	1,000.00	
Related Expenses	500.00	
Student Field Trips	300.00	
		1,800.00
Instructional Materials & Equipment		
Equipment	550.00	
Textbooks	4,000.00	
Instructional Materials	1,396.00	
A.V.	771.00	
		6,717.00
Evaluation	1,500.00	
		1,500.00
Indirect Charges		8,138.00
TOTAL DIRECT CHARGES	125,762.00	
INDIRECT CHARGES	8,138.00	
GRAND TOTAL		133,900.00

APPENDIX E

Budget Comparisons

(Page 4)

		A		B		C	D		E		F		G	
Fringe	Benefits													
	Social Security	6,513.00		6,519.00		7,913.00	5,039.00		5,490.00		5,488.00		399.00	
	Welfare	3,912.00		9,000.00		4,000.00	3,530.00		4,263.00		3,630.00		2,000.00	
	Pension	20,193.00		17,335.00		24,953.00	25,468.00		19,641.00		23,326.00		25,211.00	
	Health	3,869.00		4,560.00		9,869.00	8,295.00		9,275.00		3,298.00		1,240.00	
	Maximum Annuity	900.00							419.00					
	Educational Assistants					160.00								
Travel			44,229.00		38,921.00		99,682.00	38,133.00		28,697.00		31,548.00		28,894.00
	Conferences - Related Expe.	975.00		300.00		500.00								
	Travel - Out of Town			500.00		500.00			399.00				1,530.00	
	Local Travel	50.00		100.00		569.00	1,399.00		1,599.00		37.00			
	Field Trips						189.00		200.00					
	Project Administration	1,837.00							199.00		1,500.00		367.00	
	Home Visits										50.00			
	Substitute Coverage for teachers attending conferences					920.00								
Equipment			4,035.00		369.00		1,333.00	1,599.00		2,172.00		4,179.00		1,869.00
	Office Equipment			750.00										
	Audio - Visual Equipment						1,735.00		1,599.00		1,399.00		1,530.00	
Supplies						3,000.00	1,609.00							
	Office Supplies	997.00	97.00	853.00	7,530.00	600.00	599.00	2,365.00	1,529.00	1,509.00	963.00	1,999.00	879.00	
	Stationary	1,186.00					599.00		1,529.00					
	Thermofaxing Supplies						599.00							
	Printing - Xerox Rental					539.00								
	Text books	2,855.00		2,935.00		709.00	4,139.00		2,099.00		3,857.00		4,697.00	
	Instructional Supplies	1,883.00		860.00		945.00	1,599.00		1,499.00				2,346.00	
	Library Resources			699.00					1,499.00					
	Audio - Visual Supplies	1,685.00				791.00	1,609.00		1,499.00				939.00	
Evaluation		3,699.00	3,955.00	3,099.00	3,695.00	2,699.00	2,345.00	9,199.00	4,099.00	3,299.00	4,599.00	3,899.00	1,500.00	6,367.00
			3,699.00		3,699.00		2,599.00	99.00	99.00	3,699.00		4,599.00		4,799.00
Training														
	Teacher Training Supplies	199.00				539.00			1,599.00					
	Text books & Ref. Books					609.00			1,599.00					
	A.V. Supplies					280.00								
Staff	Development		199.00		99.00	1,561.00		799.00		2,199.00		899.00	99.00	
	Travel	67,960.00		5,200.00		6,350.00	3,599.00		5,499.00				3,699.00	
			12,960.00		1,799.00		4,560.00	3,699.00		3,599.00		799.00		1,599.00
Other														
	Students Activities						2,399.00							
	Parental Involvement						599.00		599.00					
	Registration Fees & Text books								299.00					
	Dissemination & Postage	179.00		249.00		2,099.00	599.00		299.00		779.00			
	Telephone	599.00		919.00		599.00	599.00		1,099.00		179.00			
			599.00		699.00		599.00	4,699.00	599.00	1,799.00	2,599.00	1,599.00		799.00

(Page 2)

	A		B		C		D		E		F		G	
Federal Funding Requested														
Application														
Budget Categories														
Personnel														
Fring Benefits														
Travel														
Equipment														
Supplies														
Evaluation														
Training														
Staff Development														
Other														
Total Direct Charges														
Indirect Charges														
Totals														
Non-Federal Resources														
Tax LEVY, State source														
other source														
STATE URBAN EDUCATION														
Totals														
Budget Explanation:														
Personnel														
Register Coordinator (Fall)														
Proj. Coord. (Summer)														
Assistant Coord.														
Consultant (Fall)														
Consultant (Summer)														
Guidance Counselor														
College/Vocational Advisor														
Resource Teachers (Fall)														
" (Evening)														
" (Summer)														
Teacher Trainers														
Teacher attending workshops														
Cultural Specialists														
Para-professionals (Full-Time)														
" (Part. time)														
" (Summer)														
School Secretary (Fall)														
" (Summer)														
Professional Trainees														
Parent Language Trainer														
Family worker														
In-Service & Pr. Service														

APPENDIX F

Project Summaries

APPENDIX F1

PROJECT SUMMARY (1)

		A	B	C	D	E	F	G	TOTAL
I	BUDGET SUMMARY								
	Budget Request	220,000.00	180,500.00	223,240.00	192,388.00	225,492.00	207,500.00	133,900.00	1,383,020.00
	Population	460	150	295	250	400	250	220	2,025
	ADA Student Number *	428	124	232	208	387	215	not given	
	Percentage Attendence	93	82	78,59	83	96,80	86	not given	
A.	Personnel Salary								
	Personnel Cost	135,409.00	120,124.00	150,512.00	123,500.00	146,470.00 **	134,266.00	81,251.00	891,532.00
	Pers.Cost as % of Budget	61,55	66,55	67,42	64,19	64,96	64,71	60,68	64,46
	Personnel Number	11	12	not given ***	9	not given ***	10	11	
	Students/ Personnel Number	41,82	12,50	-	27,78	-	25	20	
	ADA Student / Pers. Number	38,91	10,33	-	23,11	-	21,50	-	
	Pers. Cost / Student	294,37	800,83	510,21	494,00	366,18	537,06	369,32	440,26
	Pers. Cost / ADA Student	316,38	968,74	648,76	593,75	378,48	624,49	-	
B.	Fringe Benefits								
	Total	46,228.00	34,812.00	44,882.00	36,173.00	33,548.00	41,309.00	28,814.00	267,826.00
	% of the Budget	21,04	19,28	20,10	19,84	14,87	19,90	21,51	19,36
C.	Travel								
	Total Cost	1,035.00	900.00	1,720.00	1,800.00	2,100.00	4,180.00	1,800.00	13,535.00
	% of the Budget	0,47	0,50	0,77	0,94	0,93	2,01	1,34	0,98
	Travel Cost / Student	2,25	6,00	5,83	7,20	5,25	16,78	8,18	6,68
	Travel Cost / ADA Student	2,42	7,26	7,41	8,65	5,43	19,44	-	
D	Equipment								
	Total Cost	00	750.00	500.00	2,475.00	1,500.00	1,344.00	550.00	7,119.00
	% of the Budget	-	0,42	0,22	1,29	0,66	0,65	0,41	0,51
	Cost per Student	-	5,00	1,69	9,90	3,75	5,38	2,50	3,52
	Cost per ADA Student	-	6,05	2,16	11,90	3,88	6,25	-	
E	Supplies								
	Total Cost	7,145.00	4,095.00	2,395.00	7,100.00	4,000.00	8,189.00	6,167.00	44,091.00
	% of the Budget	3,25	2,27	1,07	3,69	1,99	3,95	4,60	3,19
	Cost / Student	15,53	27,00	8,12	28,44	22,50	38,76	28,03	21,77
	Cost / ADA Student	16,69	33,02	10,32	34,13	23,26	38,09	-	

APPENDIX F2

PROJECT SUMMARY (continued)

	A	B	C	D	E	F	G	TOTAL
F. Evaluation								
Total Cost	3,000.00	3,000.00	2,000.00	-	4,100.00	4,500.00	1,500.00	18,200.00
% of the Budget	1.36	1.66	0.90		1.82	2.17	1.12	1.31
Cost per Student								8.96
G. Training								
Total Cost	194.00	-	1,381.00	-	2,000.00	-	-	3,575.00
% of the Budget	0.09	-	0.62	-	0.89	-	-	0.26
H. Staff Development ****								
Total Cost	12,960.00	5,200.00	4,860.00	3,000.00	5,000.00	-	5,680.00	36,700.00
% of Budget	5.89	2.88	2.18	1.56	2.22	-	4.24	2.65
Cost / Student *****	28.17	34.67	16.47	12.00	12.50	-	25.82	20.68
Cost / ADA Student	30.28	41.94	20.95	14.42	12.92	-	-	
I. Other								
Total Cost	600.00	600.00	500.00	4,692.00	1,500.00	1,130.00	-	9,022.00
Percentage of the Budget	0.27	0.33	0.22	2.44	0.67	0.54	-	0.65
J. Direct Charges								
Total Cost	206,571.00	169,481.00	208,750.00	180,740.00	205,218.00	194,918.00	125,762.00	1,291,440.00
Cost / Student	449.07	1,129.87	907.63	722.96	513.05	779.68	571.65	637.75
Cost / ADA Student	482.64	1,366.78	899.78	868.94	530.28	906.50	-	
K. Indirect Charges								
Total Cost	13,429.00	11,016.00	14,510.00	11,648.00	13,242.00	12,582.00	8,138.00	84,565.00
Cost / Student	29.19	73.44	49.19	46.59	33.11	50.30	36.99	41.76
Cost / ADA Student	31.38	88.84	62.54	56.00	34.22	58.53	-	
% of the Budget	6.10	6.10	6.50	6.05	5.87	6.06	6.08	6.11
L. Grand Total								
Total Cost	220,000.00	180,497.00	223,260.00	192,388.00	218,460.00	207,300.00	133,910.00	1,376,013.00
Cost / Student	478.26	1,203.31	756.81	769.55	546.15	830.00	608.68	679.31
Cost / ADA Student	514.02	1,455.62	962.33	924.04	564.50	965.12	-	679.2

ADA : Average Daily Attendance

Personnel Cost ; Including Salary for Teacher Trainers (see Training Itm) & In-Service, Pre-Service,

Summer, Afternoon, Evening, and Regular Staff not reported separately

Staff Development : Tuition

Number of Students : 1,773 (7 schools)

APPENDIX F2

Project Summary (3)

	A	B	C	D	E	F	G	TOTAL
II. STAFFING MIX - FALL								
A_1. Coordinator								
Number	1	1	1	1	1	1	1	
Total Cost	24,680.00	19,980.00	20,000.00	18,500.00	20,350.00	19,526.00	21,234.00	144,270.00
Percentage of the Budget	0.11	0.11	0.09	0.09	0.09	0.09	0.16	0.10
Cost Per Student	53.65	133.20	67.80	74.00	50.88	78.10	96.52	71.24
Cost Per ADA Student	57.66	161.13	86.21	90.24	52.58	90.82	-	
A_2. Assistant-Coordinator								
Number				1				
Total Cost				15,425.00				15,425.00
Percentage of the Budget				0.08				0.01
Cost per Student				61.70				
Cost Per ADA Student				75.24				
B. Consultants								
Number	1	0	0	0	0	0	1	
Total Cost	1,500.00						2,000.00	3,500.00
Percentage of Budget	0.01						0.01	0.003
Cost Per Student	3.26						9.09	5.15
Cost Per ADA Student	3.50							
C. Guidance Counselor								
Number	1	1	0	1	1	1	0	
Total Cost	21,978.00	17,000.00		20,647.00	18,000.00	17,737.00		95,362.00
Percentage of Budget	0.10	0.09		0.10	0.08	0.09		0.07
Cost Per Student	47.78	113.33		82.59	45.00	70.95		63.15
Cost Per ADA Student	51.35	137.10		100.72	46.51	82.50		
D. College/Vocational Advisors								
Number	1	0	0	0	0	0	0	
Total Cost	14,000.00							
% of Budget	0.06							
Cost Per Student	30.43							
Cost Per ADA Student	32.71							
E. Resource Teachers								
Number	4	4	5	3	3	3	3	
Student No. Per Teacher	115	37.50	59	83.33	133.33	83.33	73.33	
ADA Student Per Teacher	107	31.00	46.40	68.33	129	71.67		

APPENDIX F4

PROJECT SUMMARY

		A	B	C	D	E	F	G	TOTAL
E.	E. Resource Teachers (cont.)								
	Total Cost	52,000.00	48,000.00	75,000.00	48,600.00	47,000.00	57,000.00	43,500.00	371,100.00
	Percentage of Budget	0.24	0.27	0.34	0.25	0.21	0.27	0.32	0.27
	Cost Per Student	113.04	320.00	854.24	194.40	117.50	228.00	197.73	183.26
	Cost Per ADA Student	121.50	387.10	323.28	237.07	121.45	265.12		
	F. Teacher Trainers								
	Number	0	0	0	0	not given	0	0	
	Total Cost					7,857.00			7,857.00
	% of Budget					0.03			0.01
	Cost Per Student					19.64			
	Cost Per ADA Student					20.30			
	G. Cultural Specialist								
	Number	0	0	0	0	1	0	0	
	Total Cost					15,000.00			15,000.00
	% of Budget					0.07			0.01
	Cost Per Student					37.50			
	Cost Per ADA Student					38.76			
	H. Para-Professionals(Full-Time)								
	Number	1	4	3	2	3	3	0	16
	Total Cost	6,234.00	22,467.00	16,784.00	10,428.00	17,061.00	19,692.00		92,666.00
	Student No./Para-Prof	460	37.50	98.33	125.00	133.33	83.33		112.81
	ADA Student/Para-Prof	428	31	77.33	102.50	129	71.67		
	% of Budget	0.03	0.12	0.08	0.05	0.08	0.09		0.07
	Cost/Student	13.55	149.78	56.89	41.71	42.71	98.77		51.34
	Cost/ADA Student	14.57	181.19	72.34	50.87	44.09	91.59		
	I. Para-Professionals(Part-Time)								
	Number	1	0	2	0	0	0	0	3
	Students/Para-Prof	460		147.50					251.67
	ADA Students/Para-Prof	428		116					
	Total Cost	3,116.00		5,594.50					8,710.50
	% of Budget	0.01		0.03					0.01
	Cost Per Student	6.77		18.96					11.54
	Cost Per ADA Student	7.28		24.11					

APPENDIX F5

Project Summary

	A	B	C	D	E	F	G	TOTAL
J. School Secretary								
Number	1	1	1	1	1	1	1	7
Total Cost	7,776.00	6,882.00	12,450.00	9,900.00	10,250.00	10,000.00	11,000.00	68,258.00
% of Budget	0.04	0.04	0.06	0.05	0.05	0.05	0.08	0.05
Cost / Student	16.96	45.88	42.20	39.60	25.63	40.00	50.00	33.71
Cost / ADA Student	18.17	55.50	53.66	48.29	26.44	46.51		
K. Teachers attending Workshops								
Number	not given	0	0	0	0	0	0	1
Total Cost	4,125.00							4,125.00
% of Budget	0.02							0.001
Cost Per Student	8.97							
Cost Per ADA Student	9.64							
L. Professional Trainees								
Number	0	0	0	0	6	0	0	6
Total Cost					360.00			360.00
Cost Per Student					0.90			
Cost Per ADA Student					0.93			
M. Parent Language Trainer								
Number	0	1	0	0	1	0	0	2
Total Cost		5,795.00			1,997.00			7,792.00
% of Budget		0.03			0.01			
Cost/Student		38.63			4.99			
Cost/ADA student		46.73			5.16			
N. Family Workers								
Number	0	0	2	0	1	0	0	3
Total Cost			5,594.50		5,595.00			11,189.50
% of Budget			0.03		0.02			0.01
Cost Per Student			18.96		13.99			16.10
Cost Per ADA Student			24.11		14.46			18.08

APPENDIX PG

Project Summary

	A	B	C	D	E	F	G	TOTAL
II. STAFFING MIX - Summer*								
A. Coordinator								
Number	0	0	1	0	0	1	1	3
Total Cost			4,656.00			3,591.00	1,171.00	9,418.00
% of Budget			0.02			0.02	0.01	0.01
Cost Per Student **			15.76			14.36	5.02	12.31
Cost Per ADA Student			20.07			16.70		
B. Consultant								
Number	0	0	0	0	0	0	1	1
Total Cost							750.00	750.00
% of Budget								
Cost Per Student							3.41	
Cost Per ADA Student								
c. Resource Teachers								
Number	0	0	1	0	0	0	3	4
Students / Teacher ***			295				73.33	128.75
ADA Students / Teacher			232					
Total Cost			2,894.00				1,596.00	3,990.00
% of Budget			0.01				0.01	0.003
Cost Per Student			8.12				7.25	
Cost Per ADA Student			10.32					
D. Para-Professionals	0	0	1	0	0	0	0	1
Number	0	0	1	0	0	0	0	1
Total Cost			272.00					272.00
% of Budget								
Cost Per Student			0.92					
Cost Per ADA Student			1.17					
E. Secretary								
Number	0	0	1	0	0	0	0	1
Total Cost			874.00					874.00
Cost Per Student			2.96					
Cost Per ADA Student			3.77					

* Number of Students in Summer Programs is not given

** Number of students is assumed = 765

*** Number of students is assumed = 515

APPENDIX F7

PROJECT SUMMARY

	A	B	C	D	E	F	G	TOTAL
II. STAFFING MIX (cont) - EVENING								
Resource Teachers								
Number	0	0	not given	0	0	0	0	
Total Cost			6,893.00					6,893.00
Cost Per Student *			23.37					
Cost Per ADA Student			29.71					
III. CURRICULUM								
A. Curriculus (Core)								
ESL **	YES	YES	YES	YES		YES	YES	
General Science	YES	YES	YES	YES	YES	YES	YES	
Biology		YES			YES	YES		
American History					YES			
World History					YES			
Latin American History			YES					
Social Studies (gl)	YES	YES		YES	YES	YES	YES	
General Math	YES	YES	YES	YES	YES	YES	YES	
Algebra					YES			
Geometry					YES			
Spanish		YES	YES	YES				
French			YES					
Italian			YES				YES	
Hygiene				YES				
Physical Education			YES	YES				
B. Curriculus (Elective)								
NLA ***	YES			YES				
Bil. Secretarial ****	YES							
Hispanic Dance	YES							
Bil. Career Education		YES		YES				
Job Skills		YES						
Health Careers		YES						
Cosmetology		YES						
Industrial Arts			YES					
Hispanic Art & Music			YES	YES				
IBM Keypunch				YES				
Typing				YES				
Bookkeeping				YES				
Remedial Math				YES				

* Number of students in Evening Program is not given. Assumed = 295

** = ESL = English As a Second Language

*** = NLA = Native Language Art

**** = Bil. = Bilingual

APPENDIX F6

PROJECT SUMMARY

	A	B	C	D	E	F	G	TOTAL
IV. SPECIAL FEATURES								
Summer Program			YES				YES	
Evening Program			YES					
Adult Education			YES		YES			
Field Trips				YES	YES	YES	YES	
Club Activities					YES		YES	
Student Assemblies							YES	
Service to Community							YES	
Separate Facilities								
Guest Speakers from Community							YES	

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Budget Proposal Evaluation Report

(SCHOOL)	(PROGRAM TITLE)	(PROGRAM NO.)	(FUNCTION No.)
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Eastern District H.S.	Integrated Bilingual Demonstration Project	750 3679	09-67603
John Jay H.S.	Bilingual Program	750 3723	09-67606
Seward Park H.S.	Bilingual Bicultural Prog.	750 3725	09-67612 09-67662
Louis D. Brandeis H.S.	Bilingual Program	750 3726	09-67607
James Monroe H.S.	Bilingual Program	750 3704	09-67613
Sarah J. Hale H.S.	Project SABER (Stud. Assis. in Bil. Ed.)	750 3680	09-67614
George W. Wingate H.S.	Integrated Bil. Career Ed.	750 3684	09-67615
Newtown High School	Bilingual Bicultural Project	750 3681	09-67616
South Shore H.S.	BLAST (Bil. Assis. for Stud.)	750 3721	09-67617
Theodore Roosevelt H.S.	ABLE (Achiev. through Bil.Ed.)	750 3686	09-67618
Fort Hamilton H.S.	GRASP (Greek, Arabic, Spanish)	750 3706	09-67619
Bushwick H.S.	Bil. Bicultural Program	750 3705	09-67620
New Utrecht H.S.	CAPISCO (Comprehen. Academic Prog. for Italian Students)	750 3709	09-67610

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